

Proposed Renewal of the
County of Ventura
“Municipal Separate Storm Sewer
System” (MS4) Permit
Workshop

Regional Water Quality Control Board
Los Angeles Region
April 5, 2007

MS4 Permitting History – Ventura County

- Clean Water Act Section 402 (p) (1987)
- 40 CFR 122.26 (1990)
- Part 1 and Part 2 MS4 permit application
 - City of Thousand Oaks
 - City of Oxnard
 - Unincorporated Ventura County
 - Ventura County Flood Control District

MS4 Permitting Background – Ventura County

- Area wide designation
- Consolidated Part 2 application (1993)
- First term Ventura County MS4 Permit (1994)
 - Program development
- Second term Ventura County MS4 Permit (2000)
 - Program implementation

MS4 Permitting – Main Advancements in Third Term

Transparency and Accountability

- Municipal Action Levels (MALs)
- Specified Best Management Practices
- Numerical criteria to reduce runoff volume
- Low Impact Development implementation
- Waste Load Allocations for wet weather

Land Jurisdictions in Ventura County, California

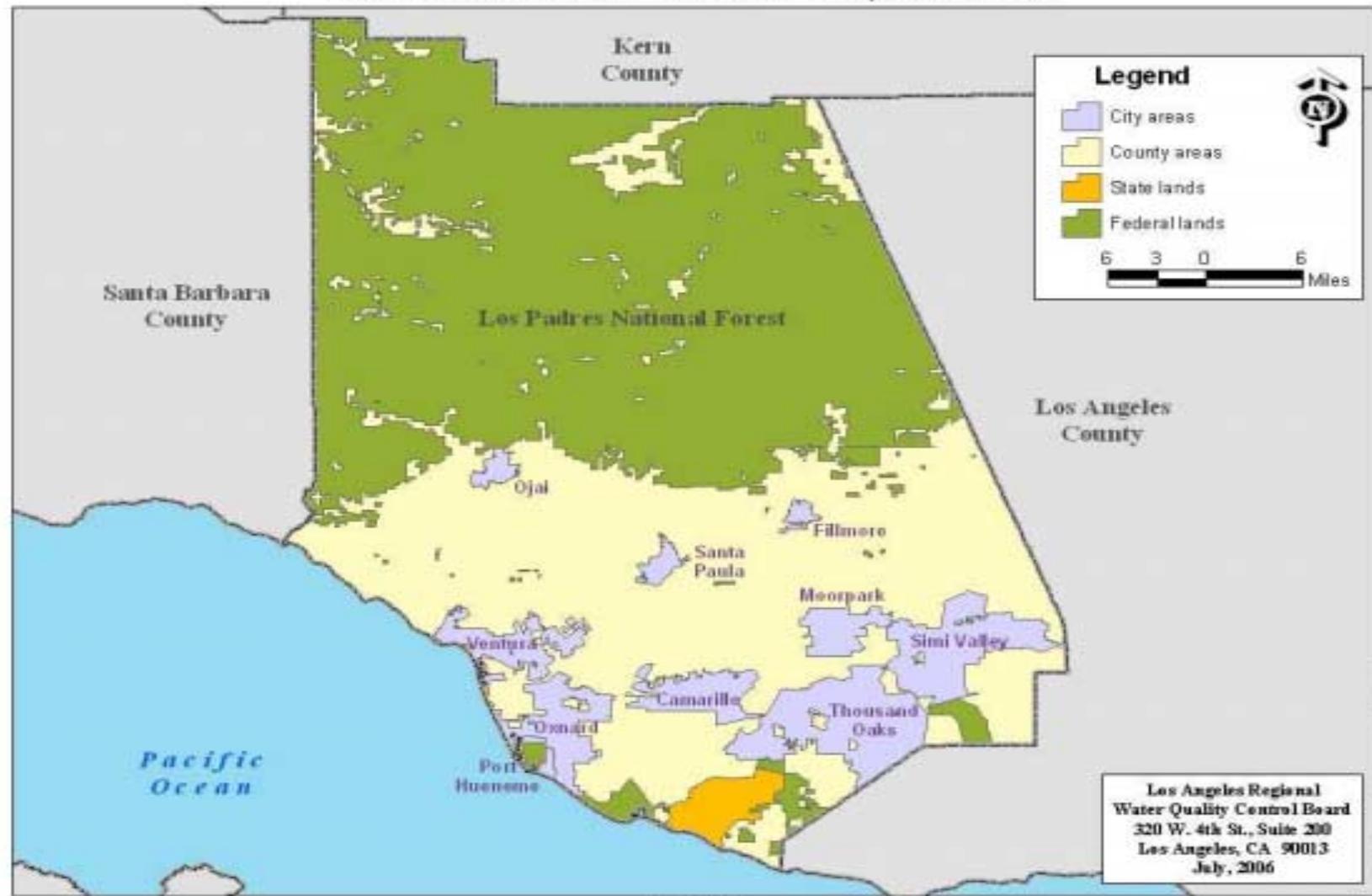


Figure 1

Ventura County with Watersheds



Municipal Storm Drain Systems Within Ventura County

CO-PERMITTEE AGENCIES	OPEN CHANNEL SOFT SIDE AND BOTTOM	OPEN CHANNEL HARD SIDE OR BOTTOM	OPEN CHANNELS HARD SIDE AND BOTTOM	UNDERGROUND STORM DRAINS	DITCHES	GUTTERS	OTHER STORM DRAIN	TOTAL LENGTH in ft.
Principal Co-permittee								
VCWPD	409,728	307,296	204,864	102,432	-	-	-	1,024,320
Co-permittees								
City of Camarillo	-	-	-	400,00	32,178	2,956,800	1.095	3,390,073
County of Ventura	29,568	22,176	14,784	7,392	-	-	-	73,920
City of Fillmore	-	-	300	35,500	1,000	316,800	-	353,600
City of Moorpark	-	-	-	136,000	10,000	940,000	22	1,086,022
City of Ojai	-	-	7,920	31,680	-	337,920	-	377,520
City of Oxnard	63,360	15,840	26,400	211,200	-	2,112,00	-	2,428,800
City of Port Hueneme	5,000	-	-	66,000	-	440,000	-	511,000
City of Ventura	9,477	-	9,869	-	76,603	-	1,708	97,657
City of Santa Paula	582	-	-	96,817	18,174	633,600	-	749,173
City of Simi Valley	4,000	-	1,000	553,115	-	3,146,880	-	3,704,995
City of Thousand Oaks	-	534	-	790,164	-	5,533,440	-	6,324,138

MS4 Permit

- This Permit represents a challenge and a willingness to achieve an effective goal oriented Storm Water Program by both the Ventura Countywide Storm Water Quality Management Program and the Los Angeles Water Board

Public Information & Participation Program – Objectives

- Increase public awareness of the potential impacts on storm water quality common activities can have, such as vehicle maintenance and improper household waste materials disposal
- Create an increase in public knowledge of storm water regulations



Public Information & Participation Program – Current

- Existing Requirements
 - Designation of staff contact(s) to provide storm water quality information
 - Implementation of educational activities and participation in county wide events
 - Distribution of outreach materials to the general public and school children
 - Distribution of educational materials to industrial/commercial facilities



Public Information & Participation Program – New Provisions

- Additional Pollutant-Generating Activities Targeted for Educational Outreach
- Organization of Watershed Citizen Advisory Groups/Committees
- Option to Provide Funds to the Environmental Education Account in Lieu of Providing Funding to School Districts



Public Information & Participation Program – New Provisions

- Implementation of a Corporate Outreach Program



Illicit Connections & Illicit Discharges Elimination Program – Objective

- Each Permittee shall eliminate all Illicit Connections and Illicit Discharges (IC/ ID) to the storm drain system.



Illicit Connections & Illicit Discharges Elimination Program – Current

- Existing Requirements
 - Investigation of illicit discharge/dumping incidents
 - Referral of non-storm water discharges and connections to an appropriate agency



Illicit Connections & Illicit Discharges Elimination Program – New Provisions

- Mapping required of permitted connections to storm drain systems
- Field screening for illicit connections to storm drain systems required
- Investigation of reported suspected illicit connections

Industrial & Commercial Program

General Objectives

- To reduce and control the contribution of pollutants in storm water from sites of industrial/commercial activity
- Establish the responsibilities of the municipal operator to control pollutants discharged through municipal systems

Source: FR 11/19/1993

Industrial & Commercial Program – Current

- Site Visits
- Type of Facilities
 - Automotive Service
 - Food Service
 - Phase I facilities notification of need to comply with IASGP
 - Additional facilities to be identified based on Pollutants of Concern
- Emphasis on Education
 - Distribution of educational materials
 - Site visits, once every 24 months

Industrial & Commercial Program – Proposed Provisions

- Education Only Not Enough
 - Education-only visits are simply not enough for all sites
 - Inspections do make a difference
- Target the Pollution Sources
 - Critical source sites that contribute disproportionately to storm water pollution

Industrial & Commercial Program – Proposed Provisions

- Require and confirm the implementation of a minimum set of mandatory BMPs
- Frequency of inspections
 - Twice in five years
- Same categories of facilities covered with the addition of non-agricultural nurseries



Focus on Source Control



Focus on Source Control



Not Ventura based photo



Land Development Planning

General Objectives

- To maintain the pre-construction natural hydrology of the site to reduce adverse impacts
- To select the most appropriate suite of post-construction storm water controls during project planning and design for implementation during construction

Land Development Planning Categories – Current

Existing New Development Categories

- Hillside residences, ten or more unit housing developments
- 100,000 square feet or greater commercial developments
- Automotive repair shops, retail gasoline outlets, and restaurants
- Parking lots 5,000 sq. ft. or greater
- Projects situated in or adjacent to environmentally sensitive areas

Land Development Planning Provisions – Current

Existing Planning Provisions

- Peak flow rate control
- Water quality volume/ flow criteria
- Modify CEQA guidelines and checklist to address storm water mitigation
- Incorporate watershed and storm water elements in General Plans during significant rewrite

Land Development Planning

Specific Objectives of Proposed Changes

- Implement flow/volume control measures to prevent hydromodification / protect stream habitat
- Implement an integrated approach to removing pollutants, reducing runoff, and reusing storm water
- Reduce effective impervious area to less than five percent of project area
- Implement Low Impact Development (LID) strategies

Land Development Planning Categories – Proposed

Proposed Categories - New

- Disturbed land area of one acre or greater
- Streets, roads, highways 5,000 sq. ft. or greater
- Industrial parks 5,000 sq. ft. or greater
- Commercial strip malls 5,000 sq. ft. or greater

Land Development Planning Categories – Proposed

Categories - Continuing

- Parking lots 5,000 sq. ft. or greater
- Projects situated in or adjacent to environmentally sensitive areas
- Automotive repair shops, retail gasoline outlets, and restaurants

Land Development Planning Provisions – Proposed

Proposed Development Planning Provisions

- Tiered numerical hydromodification criteria
- Tiered water quality mitigation design criteria
- Post construction BMP maintenance and transfer agreement
- Post construction BMP inspection and tracking
- Regional and Redevelopment Area Mitigation alternative

Land Development Planning Provisions – Proposed

Categories – Continuing

- Modify CEQA guidelines and checklist to address storm water mitigation
- Incorporate watershed and storm water elements in General Plans during significant rewrite

Development Construction Program Objectives

- Reduce/eliminate sediment loss
- Sediment a primary pollutant impacting beneficial uses
- Sedimentation/siltation adversely affect fish spawning
- Other pollutants adsorb onto sediment particles

Development Construction Program

Current Categories

- Storm Water Pollution Control Plan (SWPCP)
- Signatory and proper site oversight requirements
- Proof of notice of intent (NOI) before city permits are issued
- Educational outreach and wet season inspection with follow-up and enforcement, as necessary
- Training of city/county inspectors

Development Construction Program New Provisions

- Grading Prohibitions
- Minimum set of best management practices (BMP) Requirements
- Inspection Requirements
- Interagency Coordination



Development Construction Program

Grading Prohibitions

- Wet season (October 1-April 15) land disturbance prohibition only at sites that fall in one or more of the following criteria:
 - Hillsides with 20% or steeper slopes
 - Sites directly discharging to a 303 (d) water body listed for siltation or sediment
 - Within or adjacent (200 feet) to an environmentally sensitive area (ESA)

Development Construction Program Additional Requirements

- Build upon the program already being implemented
- Optimize the inspectors presence onsite
- Standardize best management practices (BMPs) for construction activities
- Standardize legal requirements and enforcement countywide



Development Construction Program Additional Requirements

- Site propensity to lose massive sediments in wet season despite best efforts
- Examples include a canyon residence tract and another site which impacted Malibu Creek
- Only approximately less than 8% of active construction sites in Ventura impacted by the prohibition
- Permittees may request Executive Officer for a waiver for good cause

Development Construction Program

Minimum Set of BMPs

- Acreage - based approach
- Includes best management practices (BMPs) for roadway paving and repaving operations
- Commonly used BMPs and recommended by California Storm water Quality Association and Caltrans
- Provides the option of BMP substitution

Public Agency Activities – Existing

- A Model Storm Water Pollution Control Plan for each City Yard
 - Includes General BMPs
 - Discharge Prohibitions
- Trash Management Controls – Street Sweeping
- Storm Drain Maintenance and Cleaning
- Staff Training

Public Agency Activities – Proposed

- Standardized Permitting and BMPs for Construction Activity, Public Works/Capital Improvement Projects
- Post Construction Controls for Public Projects consistent with Private Projects
- Standard Trash Management Controls
- Storm Drain Maintenance and Treatment Controls
- Conditionally Allowing Municipal Potable Water Supply Discharges

Sewage System Operations

- Sewage System Operations
 - Implement a Response Plan
 - Maintain System
 - Provide Notification to Appropriate Agencies (2 hrs)
 - Initiate Immediate Response to Overflows/Spills (2 hrs)

Public Construction Projects Equal to Private Requirements

- Development Planning Requirements Apply
- Construction Requirements Apply
- Capital Improvement Projects must obtain Separate Construction NPDES Storm Water Permit
- Linear Construction Requires a Separate Linear Construction NPDES Storm Water Permit

Public Agency Activities – Changes

- Corporation Yards - Vehicle Maintenance Areas, etc...
 - Standard Implementation of General and Activity-Specific BMPs
- Landscape and Parks
 - Implement Integrated Pest Management (IPM) Program
 - Training of Pesticide Applicators to Reduce Discharge of Pesticides to Environment
 - Encouraging Use of Water Saving Native Plants

Storm Drain Operation

- ABC Prioritization of Catch Basins for Cleaning and when 25% full
- Trash Mgmt at Public Events
- Trash Receptacles at Transit Stops and Install and Maintain Catch Basin Trash Excluders in Commercial Areas and near Schools
- Maintenance of Storm Drains before Rains
- Inspect and Maintain Publicly Owned Treatment Controls

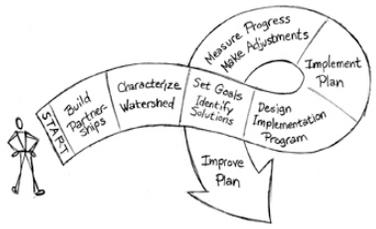
Public Agency Requirements – Changes

- Street Sweep Commercial Areas and near Schools 2x/month
- Municipal Industrial Activities Require Separate NPDES Permit



Watershed Ecological Restoration Planning

- Purpose of restoration - reestablish ecological integrity
- Purpose of planning - provide a tool
- CWA § 303(d) list of impaired waterbodies
- Watershed Ecological Restoration Plan (ERP) and Annual Watershed Ecological Restoration Status Report (ERSR)



Watershed Ecological Restoration Planning

- ERP contains basic restoration principles:
 - Addressing ongoing causes of degradation.
 - Focusing on feasibility
 - Developing clear, achievable & measurable goals
 - Involving a multi-disciplinary team such as:
 - Wetlands Recovery Project
 - Ventura County Task Force of the Wetlands Recovery Project



Watershed Ecological Restoration Planning

- ERSR is developed on the ERP and includes:
 - Background Information
 - Evaluation of site conditions
 - Progress towards goals, linked to specific stressors and measurement endpoints
 - Bioassessment monitoring data



Total Maximum Daily Load (TMDL) Provisions

- MS4 TMDL Waste Load Allocations (WLAs) have been incorporated into this Permit
- WLAs are expressed as provisions
- WLAs have monitoring requirements



TMDL Provisions

- MS4 TMDL WLAs that have been adopted and incorporated into this Permit are:
 - Santa Clara River - Nitrogen Compounds
 - Malibu Creek - Bacteria
 - Calleguas Creek - Toxicity, Chlorpyrifos, and Diazinon
 - Calleguas Creek - Organochlorine Pesticides, Polychlorinated Biphenyls (PCBs), and Siltation



Monitoring Program

- New provisions consist of:
 - Relocation of the ME-SCR
 - Submittal of Monitoring Data Electronically
 - Total Suspended Solids (TSS) Testing
 - Toxicity Reduction Evaluation (TRE)
Corrective Action Plan
 - Tributary Monitoring
 - MS4 TMDL WLA Monitoring
 - Special Studies



Reporting Program

- Reporting Program requires an Annual Report
- Annual Report is composed of:
 - Monitoring Report
 - Program Report
- Details of Annual Report questions to be determined

Ventura County Municipal Storm Water Permit – Draft

Significant Advancements

- Municipal Action Levels
- Hydromodification Control Criteria
- Low Impact Development Strategies
- Wet Season Hillside Grading Restriction
- Monitoring for Compliance
- TMDL Implementation